

PharmaDrug Provides Development Update of Cepharanthine (PD-001) for Cancer and Infectious Disease

Toronto, Ontario--(Newsfile Corp. - September 14, 2023) - PharmaDrug Inc. (CSE: PHRX) (OTCQB: LMLLF) ("**PharmaDrug**" or the "**Company**"), is pleased to provide an update on the development activities of the Company's patented reformulated enteric coated version of orally bioavailable Cepharanthine (PD-001) as a potential treatment for oncology and infectious disease. The technical transfer and development activities with Genvion Corporation are well-underway in preparation for clinical GMP manufacturing batches of PD-001 to support future filings to Australia's Therapeutic Goods Administration (TGA) and Food and Drug Administration (FDA) in the United States.

Robert Steen, CEO and Chairman of PharmaDrug commented, "With the PharmaTher partnership now in full swing and the product safely in the hands of Genvion, we are excited by the full renewal of the PD-001 program and look forward to significantly advancing the clinical ready batch for in human trials for several potential indications in Australia and ultimately in the United States."

Current development activities include the establishment of analytical testing methods, manufacturing protocols, as well as execution and performance assessment approaches for PD-001 API to enable scale up activities for future clinical research needs. Manufacturing of a feasibility batch to demonstrate capability will occur within this quarter to allow the Company to define its manufacturing process and evaluate material characteristics. In addition, the initiation of stability studies will define product performance and support shelf-life considerations. These studies and data will provide information to confirm manufacturing readiness, which once achieved, will enable the transition to manufacture GMP PD-001 final product from the available GMP cepharanthine 2-HCL API materials. Manufacturing of the final product is scheduled for the first quarter of 2024. These materials will support potential Phase 1 and 2 clinical trials of PD-001 for oncology and infectious diseases. Downstream manufacturing efforts required to produce the orally bioavailable clinical drug product will also be completed by Genvion Corporation. The Company will commence working on a regulatory application to the TGA for an in human safety trial in Australia in the first quarter of 2024.

About PD-001 (Enteric-coated Oral Cepharanthine)

Cepharanthine is a natural product and an approved drug used for more than 70 years in Japan to successfully treat a variety of acute and chronic diseases. In clinical research, cepharanthine has been shown to exhibit multiple pharmacological properties including anti-oxidative, anti-inflammatory, immunoregulatory, anti-cancer, anti-viral and anti-parasitic effects^{1,2}. However, historically cepharanthine's low oral bioavailability has represented a major obstacle to realizing its full clinical potential.

The Company is focused on advancing the clinical development of an improved and patented enteric-coated oral formulation of cepharanthine (PD-001) to treat responsive cancers and COVID-19. Compared to generic cepharanthine, PD-001 has been shown in rodent and non-rodent models to possess markedly improved oral bioavailability (more easily absorbed). These findings support the development of an orally administered formulation, and in so doing, removes the undesirable requirement for frequent intravenous dosing to maintain therapeutic levels of drug in circulation. The Company endeavours to develop an efficacious oral therapeutic to potentially improve outcomes for infectious disease and oncology applications.

About PharmaDrug Inc.

PharmaDrug is a specialty pharmaceutical company focused on the research, development and commercialization of controlled-substances and natural medicines such as psychedelics and previously

approved drugs. PharmaDrug owns 51% of Sairyo Therapeutics ("Sairyo"), a biotech company that specializes in researching and reformulating established natural medicines with a goal of bringing them through clinical trials and the associated regulatory approval process in the US and Europe. Sairyo is currently developing its patented reformulation of cepharanthine, a drug that has shown substantial third party validated potential for the treatment of infectious disease (including Covid-19) and rare cancers. Sairyo is also conducting R&D in the psychedelics space for the treatment of non-neuropsychiatric conditions.

For further information, please contact:

Daniel Cohen, IR Consultant
dcohen@pharmadrug.co
(647) 202-1824

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THE CANADIAN SECURITIES EXCHANGE HAS NOT REVIEWED NOR DOES IT ACCEPT RESPONSIBILITY FOR THE ADEQUACY OR ACCURACY OF THIS RELEASE.

This press release contains "forward-looking information" within the meaning of applicable securities legislation. All statements, other than statements of historical fact, included herein are forward-looking information. Generally, forward-looking information may be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "proposed", "is expected", "budgets", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases, or by the use of words or phrases which state that certain actions, events or results may, could, would, or might occur or be achieved. In particular, this press release contains forward-looking information in relation to: the progress of the development and approval of PD-001 and the Company's business plans. This forward-looking information reflects the Company's current beliefs and is based on information currently available to the Company and on assumptions the Company believes are reasonable. These assumptions include, but are not limited to the ability of the Company to reach an agreement on the terms of the investment, the ability of the Company to execute on its plans for the Company and its affiliated entities; the ability to obtain required regulatory approvals and the Company's continued response and ability to navigate the COVID-19 pandemic being consistent with, or better than, its ability and response to date and the ability of the Company to complete all required audit processes in a timely fashion.

Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information. Such risks and other factors may include, but are not limited to: the ability to enter into definitive agreements with the proposed strategic investor, general business, economic, competitive, political and social uncertainties; general capital market conditions and market prices for securities; the actual results of the Company's future operations; competition; changes in legislation affecting the Company; the ability to obtain and maintain required permits and approvals, the timing and availability of external financing on acceptable terms; lack of qualified, skilled labour or loss of key individuals; risks related to the COVID-19 pandemic.

A description of additional risk factors that may cause actual results to differ materially from forward-looking information can be found in the Company's disclosure documents on the SEDAR+ website at www.sedarplus.ca. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. Accordingly, readers should not place undue reliance on forward-looking information. Readers are cautioned that the foregoing list of factors is not exhaustive. Readers are further cautioned not to place undue reliance

on forward-looking information as there can be no assurance that the plans, intentions or expectations upon which they are placed will occur. Such information, although considered reasonable by management at the time of preparation, may prove to be incorrect and actual results may differ materially from those anticipated.

The Company's securities have not been registered under the U.S. Securities Act of 1933, as amended (the "U.S. Securities Act"), or applicable state securities laws, and may not be offered or sold to, or for the account or benefit of, persons in the United States or "U.S. Persons", as such term is defined in Regulations under the U.S. Securities Act, absent registration or an applicable exemption from such registration requirements. This press release shall not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of the securities in the United States or any jurisdiction in which such offer, solicitation or sale would be unlawful.

Forward-looking information contained in this press release is expressly qualified by this cautionary statement. The forward-looking information contained in this press release represents the expectations of the Company as of the date of this press release and, accordingly, are subject to change after such date. However, the Company expressly disclaims any intention or obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, except as expressly required by applicable securities law.

References:

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2. Zhou P, Zhang R, Wang Y, Xu D, Zhang L, Qin J, Su G, Feng Y, Chen H, You S, Rui W, Liu H, Chen S, Chen H, Wang Y. Cepharanthine hydrochloride reverses the mdr1 (P-glycoprotein)-mediated esophageal squamous cell carcinoma cell cisplatin resistance through JNK and p53 signals. *Oncotarget*. 2017 Nov 27;8(67):111144-111160. doi: 10.18632/oncotarget.22676. Erratum in: *Oncotarget*. 2021 Jan 05;12(1):61-62. PMID: 29340044; PMCID: PMC5762312.



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